

## DISCUSSION GROUP P5

### CENTRIFUGAL PUMP OPERATION, MAINTENANCE, and RELIABILITY



**Jacek Jarosz**, is a Global Leader of Rotating Equipment Technology with Flint Hills Resources Co. In his current assignment he provides technical support for reliability policy, specs and standards, selection and procurement of machinery in Flint Hills Corp. Mr. Jarosz's past experience includes reliability, maintenance and project positions with DuPont Co. and Celanese Ltd. supporting domestic and international chemical operations. Mr. Jarosz received BSME from University of Delaware in 1990. He is a member of ASME and Vibration Institute.

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**Scott McPherson** is Sulzer Pumps (US) inc's Central Region Engineering Manager for the Customer Support Services (CSS) division. His responsibilities include repair, design, rerate, upgrade, retrofit and root cause failure determination of centrifugal pumps. Mr McPherson has been working within the pump manufacturing industry since 1994, and has been with Sulzer Pumps since 2005. He has a B.Eng. (hons) degree from the University of Strathclyde in Glasgow, Scotland, and is currently an active member of the API687 Rotor Repair task force.

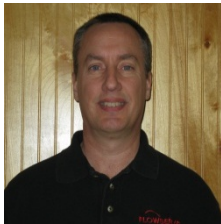
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**Rhett Martin** is with Flint Hills Resources in Port Arthur, Texas.

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**Ralph Henry Borchard** is a Machinery Engineer at Lyondellbasell Houston Refining. He is a graduate of Texas A&M University with a B.S. in Mechanical Engineering.

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**Watson Tomlinson** is an Industry Specialist, Nuclear NA in the Flow Solutions Group of Flowserve. He joined Flowserve in 1999 after more than 17 years with Duke Power Co. His responsibilities include failure analysis, vibration analysis, field performance testing and technical support for pumps at nuclear facilities in North America. Mr. Tomlinson has performed pump and system testing in over 100 facilities in the eastern United States as well as the Caribbean. This includes testing and root cause failure analysis at power plants, refineries, chemical, paper and water treatment facilities. Prior to Flowserve Mr. Tomlinson's experience at Duke Power included maintenance and troubleshooting of rotating equipment and systems where he worked in both nuclear and fossil stations. Mr. Tomlinson has a B.S. degree in Mechanical Engineering from North Carolina State University (1982).

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**Luis Gonzalez** is with Phillips 66 in Houston, Texas.

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**William McCullough** is with Flint Hills Resources in Rosemount, Minnesota.

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